DAIKIN

technical data

air conditioning systems

FCQ-B7

4-way Blow Ceiling Mounted Cassette (950mm x 950mm)

Split Sky Air

Split - Sky Air

ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment

Daikin units comply with the European regulations that guarantee the safety of the product.

Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.

Daikin Europe N.V. participates in the Eurovent Certification Programme for Air Conditioners (AC), Liquid Chilling Packages (LCP) and Fan Coil Units (FC); the certified data of certified models are listed in the Eurovent Directory.

Specifications are subject to change without prior notice.

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Prepared in Belgium by Goekint Graphics

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FCQ-B7

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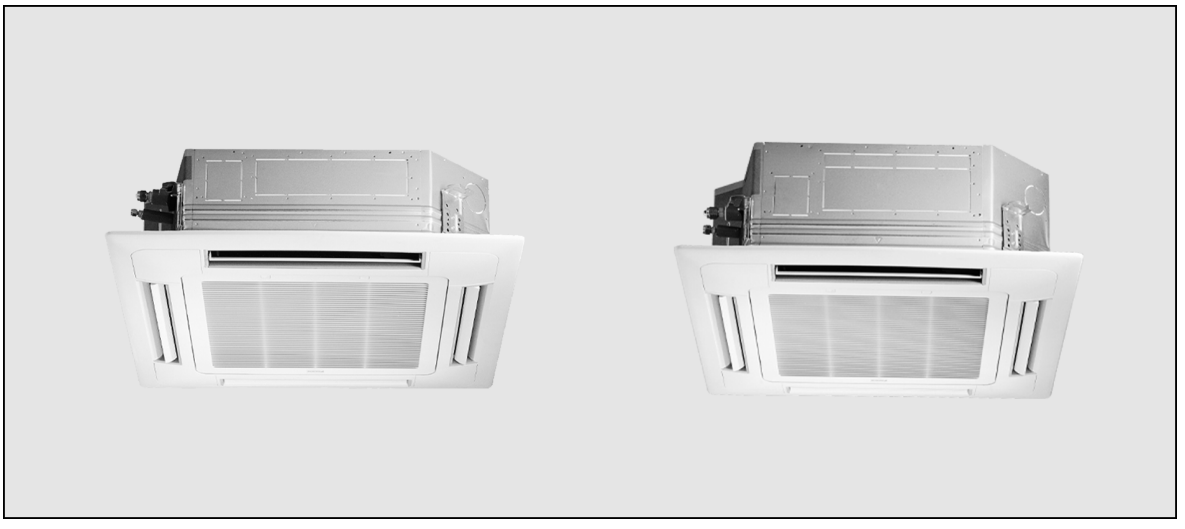
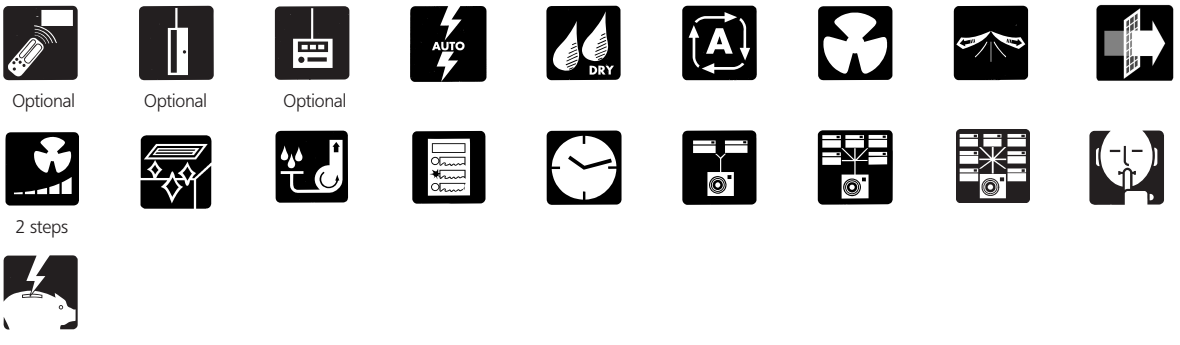
* For capacity tables, please refer to part II: outdoor units

OPTIMISED DESIGN R-410A

1 Features

- Leaves maximum floor and wall space for furniture, decoration and fittings
- Fits flush into each ceiling
- Extremely quiet in operation both indoors and outdoors
- Air can be discharged in any of four directions
- Possibility of using 1 or 2 branches for better air distribution
- Possibility to shut off 1 or 2 flaps for easy installation in corners
- Air flow distribution for ceilling heights up to 4.2m without loss of capacity
- Up to 4 indoor units can be connected to 1 Multi outdoor unit. All indoor units are individually controllable with remote control and do not need to be installed in the same room.
- Daikin remote controls give you easy control at your fingertips.
- The wired remote control provides you with a schedule timer, enabling to program the air conditioning daily or weekly.
- The optional remote ON/OFF enables you to start/stop the air conditioning from a mobile phone via a telephone remote control (field supply).
- The optional forced OFF enables you to switch off the unit automatically. E.g. when a window is opened, the unit switches off.
- The 'home leave' operation button prevents large temperature differences by continuously operating at a minimum (heating mode) or maximum (cooling mode) preset level while you're out or sleeping. It also allows the indoor temperature to return quickly to your favourite comfort level.





2 Specifications

NOMINAL CAPACITY and NOMINAL INPUT						
For indoor units only:						
INDOOR UNITS				**FCQ35B7V1**	**FCQ50B7V1**	**FCQ60B7V1**
NOMINAL INPUT	Cooling		kW	0.140	0.140	0.161
	Heating		kW	0.140	0.140	0.161

For combination indoor + outdoor units (air cooled):								
INDOOR UNITS				**FCQ35B7V1**	**FCQ50B7V1**	**FCQ60B7V1**	**FCQ50B7V1**	**FCQ60B7V1**
OUTDOOR UNITS				**RKS35DVMB**	**RKS50BVMB9**	**RKS60BVMB9**	**RS50BVMB**	**RS60BVMB**
CAPACITY (3)	Cooling	min.~nom.~max.	kW	3.40 (nom.)	0.90~5.00~5.60	0.90~5.70~6.00	0.90~5.00~5.60	0.90~5.70~5.60
NOMINAL INPUT	Cooling	nominal	kW	1.21	1.92	2.19	1.92	2.19
EER				2.81	2.60	2.60	2.60	2.60
ENERGY LABEL	Cooling			C	E	E	E	E
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	605	960	1,095	960	1,095

For combination indoor + outdoor units (air cooled):						
INDOOR UNITS				**FCQ35B7V1**	**FCQ50B7V1**	**FCQ60B7V1**
OUTDOOR UNITS				**RXS35DVMB**	**RXS50BVMB**	**RXS60BVMB**
CAPACITY (3)	Cooling	min.~nom.~max.	kW	3.40 (nom.)	0.90~5.00~5.60	0.90~5.70~6.00
	Heating	min.~nom.~max.	kW	4.10 (nom.)	0.90~6.00~7.00	0.90~7.00~8.00
NOMINAL INPUT	Cooling	nominal	kW	1.21	1.92	2.19
	Heating	nominal	kW	1.28	1.87	2.19
EER				2.81	2.60	2.60
COP				3.20	3.21	3.20
ENERGY LABEL	Cooling			C	E	E
	Heating			C	C	D
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	605	960	1,095

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS				**FCQ35B7V1**	**FCQ50B7V1**	**FCQ60B7V1**
DIMENSIONS	Unit	H	mm	230		
		W	mm	840		
		D	mm	840		
	Decoration panel	H	mm	40		
		W	mm	950		
		D	mm	950		
WEIGHT	Unit		kg	23		
	Decoration panel		kg	5		
MATERIAL	Unit			Galvanised steel plate		
COLOUR	Decoration panel			White		
SOUND LEVEL	Sound pressure (cooling/heating) (1)	high	dB(A)	31/31		33/33
		low	dB(A)	27/27		28/28
	Sound power		dB(A)	48		50
FAN	Air flow rate (cooling/heating)	high	m^3/min	14/14	15/15	18/18
		low	m^3/min	10/10	11/11	14/14
	Speed	steps		2 steps		
	Type			Turbo fan		
	Qty x motor output		W	1 x 45		
	Drive			Direct drive		
HEAT EXCHANGER	Type			Cross fin coil Φ 7 Hi-XA tubes		
	Rows x stages x fin pitch		mm	2 x 8 x 1.5		
	Face area		m^2	0.331		
AIR FILTER				Resin net (with mold resistant)		
PIPING CONNECTIONS		liquid	mm	Φ6.4 (flare)		
		gas	mm	Φ9.5 (flare)	Φ12.7 (flare)	
		drain I.D.	mm	Φ25 (VP25)		
		drain O.D.	mm	Φ32 (VP25)		
INSULATION MATERIAL	Heat insulation			Foamed polystyrene		
	Sound absorbing insulation			Foamed polystyrene		

For outdoor units only:	Pair application	See chapters RS-B + RKS-D/B + RXS-D/B
	Multi model application	See chapters MKS-D, MXS-D, RMXS-D

2 Specifications

2

NOMINAL CAPACITY and NOMINAL INPUT

For indoor units only:

INDOOR UNITS			**FCQ71B7V3B**	**FCQ100B7V3B**	**FCQ125B7V3B**
NOMINAL INPUT	Cooling	kW	0.161	0.204	0.238
	Heating	kW	0.161	0.204	0.238

For combination indoor + outdoor units (air cooled):

INDOOR UNITS				**FCQ71B7V3B**	**FCQ100B7V3B**	**FCQ125B7V3B**
OUTDOOR UNITS				**RR71B7V3B/RR71B7W1B**	**RR100B7V3B/RR100B7W1B**	**RR125B7W1B**
NOMINAL CAPACITY (3)	Cooling (1)	nominal	kW	7.1	10	12.5
NOMINAL INPUT	Cooling	nominal	kW	2.72/2.66	3.83/3.56	4.66
EER				2.61/2.67	2.61/2.81	2.68
ENERGY LABEL	Cooling			D/D	D/C	D
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	1,360/1,330	1,915/1,780	2,330
INDOOR UNITS				**FCQ71B7V3B**	**FCQ100B7V3B**	**FCQ125B7V3B**
OUTDOOR UNITS				**RQ71B7V3B/RQ71B7W1B**	**RQ100B7V3B/RQ100B7W1B**	**RQ125B7W1B**
NOMINAL CAPACITY (3)	Cooling (1)	nominal	kW	7.1	10	12.5
	Heating (2)	nominal	kW	8	11.2	14.6
NOMINAL INPUT	Cooling	nominal	kW	2.72/2.66	3.83/3.56	4.66
	Heating	nominal	kW	2.85/2.80	3.75/3.66	5.06
EER				2.61/2.67	2.61/2.81	2.68
COP				2.81/2.86	2.99/3.06	2.89
ENERGY LABEL	Cooling			D/D	D/C	D
	Heating			D/D	D/D	D
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	1,360/1,330	1,915/1,780	2,330
INDOOR UNITS				**FCQ71B7V3B***	**FCQ100B7V3B***	**FCQ125B7V3B***
OUTDOOR UNITS				**REQ71B7V3B/REQ71B7W1B**	**REQ100B7V3B/REQ100B7W1B**	**REQ125B7W1B**
NOMINAL CAPACITY (3)	Cooling (1)	nominal	kW	7.1	10	12.5
	Heating (2)	nominal	kW	8	11.2	14.6
NOMINAL INPUT	Cooling	nominal	kW	2.72/2.66	3.83/3.56	4.66
	Heating	nominal	kW	2.85/2.80	3.75/3.66	5.06
EER				2.61/2.67	2.61/2.81	2.68
COP				2.81/2.86	2.99/3.06	2.89
ENERGY LABEL	Cooling			D/D	D/C	D
	Heating			D/D	D/D	D
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	1,360	1,915	2,330
INDOOR UNITS				**FCQ71B7V3B**	**FCQ100B7V3B**	**FCQ125B7V3B**
OUTDOOR UNITS				**RZQ71B8V3B**	**RZQ100B8V3B/B7W1B**	**RZQ125B8V3B/B7W1B**
NOMINAL CAPACITY (3)	Cooling (1)	min.~nom.~max.	kW	3.20~7.10~8.02	5.00~10.00~11.20	5.75~12.50~14.00
	Heating (2)	min.~nom.~max.	kW	3.52~8.0~9.04	5.15~11.20~12.77	6.02~14.00~16.24
NOMINAL INPUT	Cooling	nominal	kW	2.17	2.63	3.89
	Heating	nominal	kW	2.49	3.02	4.01
EER				3.28	3.80	3.21
COP				3.21	3.71	3.49
ENERGY LABEL	Cooling			A	A	A
	Heating			C	A	B
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	1,083	1,316	1,947

- Information is not available.
* Combination only available in Portugal, Cyprus, Greece and Malta.

2 Specifications

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS				**FCQ71B7V3B**	**FCQ100B7V3B**	**FCQ125B7V3B**
DIMENSIONS	Unit	H	mm	230	288	
		W	mm	840		
		D	mm	840		
	Decoration panel	H	mm	40		
		W	mm	950		
		D	mm	950		
WEIGHT	Unit		kg	23	27	
	Decoration panel		kg	5		
MATERIAL	Unit			Galvanised steel plate		
COLOUR	Decoration panel			White		
SOUND LEVEL	Sound pressure (cooling/heating) (3)	high	dB(A)	33/33	37/37	40/40
		low	dB(A)	28/28	32/32	35/35
	Sound power (cooling) (4)	high	dB(A)	50	53	56
FAN	Air flow rate (cooling/heating)	high	m^3/min	18/18	28/28	31/31
		low	m^3/min	14/14	21/21	24/24
	Speed	steps		2 steps		
	Type			Turbo fan		
	Qty x motor output		W	1 x 45	1 x 90	
	Drive			Direct drive		
HEAT EXCHANGER	Type			Rhombus type, Φ 7 Hi-XSS tube		
	Rows x stages x fin pitch		mm	2 x 8 x 1.5	2 x 12 x 1.5	
	Face area		m^2	0.331	0.497	
AIR FILTER				Resin net (with mold resistant)		
PIPING CONNECTIONS		liquid	mm	Φ9.52 (flare)		
		gas	mm	Φ15.9 (flare)		
		drain I.D.	mm	Φ25 (VP25)		
		drain O.D.	mm	Φ32 (VP25)		
INSULATION MATERIAL	Heat insulation			Both liquid and gas pipes		

For outdoor units only:	Pair / Twin / Triple / Double twin application	See chapter RR-B7, RQ-B7, REQ-B7, RZQ-B
	Multi model application	See chapter MKS-D, MXS-D, RMXS-D

- Information is not available.

2 Specifications

2

ELECTRICAL SPECIFICATIONS

For indoor units only:				FCQ35B7V1	FCQ50B7V1	FCQ60B7V1
CURRENT	Nominal running current	cooling/heating	A	See chapters RS-B + RKS-D/B + RXS-D/B		
	Max. running current	cooling/heating	A	See chapters RS-B + RKS-D/B + RXS-D/B		

For combination indoor units + outdoor units:				FCQ35B7V1	FCQ50B7V1	FCQ60B7V1	FCQ50B7V1	FCQ60B7V1
				RKS35DVMB	RKS50BVMB9	RKS60BVMB9	RS50BVMB	RS60BVMB
CURRENT	Nominal running current	cooling	A	See chapter RKS-D/B			See chapter RS-B	
	Maximum running current	cooling	A	See chapter RKS-D/B			See chapter RS-B	
	Starting current	cooling	A	See chapter RKS-D/B			See chapter RS-B	

For combination indoor units + outdoor units:				FCQ35B7V1	FCQ50B7V1	FCQ60B7V1
				RXS35DVMB	RXS50BVMB	RXS60BVMB
CURRENT	Nominal running current	cooling/heating	A	See chapter RXS-D/B		
	Maximum running current	cooling/heating	A	See chapter RXS-D/B		
	Starting current	cooling/heating	A	See chapter RXS-D/B		

For indoor units only:			FCQ35B7V1	FCQ50B7V1	FCQ60B7V1
POWER SUPPLY			V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase		1~	1~	1~
	Frequency	Hz	50	50	50
	Voltage	V	230	230	230

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2 Specifications

ELECTRICAL SPECIFICATIONS						
For indoor units only:				**FCQ71B7V3B**	**FCQ100B7V3B**	**FCQ125B7V3B**
CURRENT	Nominal running current	cooling/heating	A	See chapter RR-B7, RQ-B7, REQ-B7, RZQ-B		
	Max. running current	cooling/heating	A	See chapter RR-B7, RQ-B7, REQ-B7, RZQ-B		

For combination indoor + outdoor units (air cooled):				**FCQ71B7V3B**	**FCQ100B7V3B**	**FCQ125B7V3B**
				RR71B7V3B/RR71B7W1B	**RR100B7V3B/RR100B7W1B**	**RR125B7W1B**
CURRENT	Nominal running current	cooling	A	See chapter RR-B7		
	Maximum running current	cooling	A	See chapter RR-B7		
	Starting running current	cooling	A	See chapter RR-B7		

For combination indoor + outdoor units (air cooled):				**FCQ71B7V3B**	**FCQ100B7V3B**	**FCQ125B7V3B**
				RQ71B7V3B/RQ71B7W1B	**RQ100B7V3B/RQ100B7W1B**	**RQ125B7W1B**
CURRENT	Nominal running current	cooling	A	See chapter RQ-B7		
	Maximum running current	cooling	A	See chapter RQ-B7		
	Starting running current	cooling	A	See chapter RQ-B7		

For combination indoor + outdoor units (air cooled):				**FCQ71B7V3B***	**FCQ100B7V3B***	**FCQ125B7V3B***
				REQ71B7V3B/REQ71B7W1B	**REQ100B7V3B/REQ100B7W1B**	**REQ125B7W1B**
CURRENT	Nominal running current	cooling	A	See chapter RZQ-B		
	Maximum running current	cooling	A	See chapter RZQ-B		
	Starting running current	cooling	A	See chapter RZQ-B		

For combination indoor units + outdoor units:				**FCQ71B7V3B**	**FCQ100B7V3B**	**FCQ125B7V3B**
				RZQ71B7V3B	**RZQ100B7V3B**	**RZQ125B7V3B**
CURRENT	Nominal running current	cooling/heating	A	See chapter RZQ-B		
	Maximum running current	cooling/heating	A	See chapter RZQ-B		
	Starting current	cooling/heating	A	See chapter RZQ-B		

For indoor units only:			**FCQ71B7V3B**	**FCQ100B7V3B**	**FCQ125B7V3B**
POWER SUPPLY			V3	V3	V3
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase		1~	1~	1~
	Frequency	Hz	50	50	50
	Voltage	V	230	230	230

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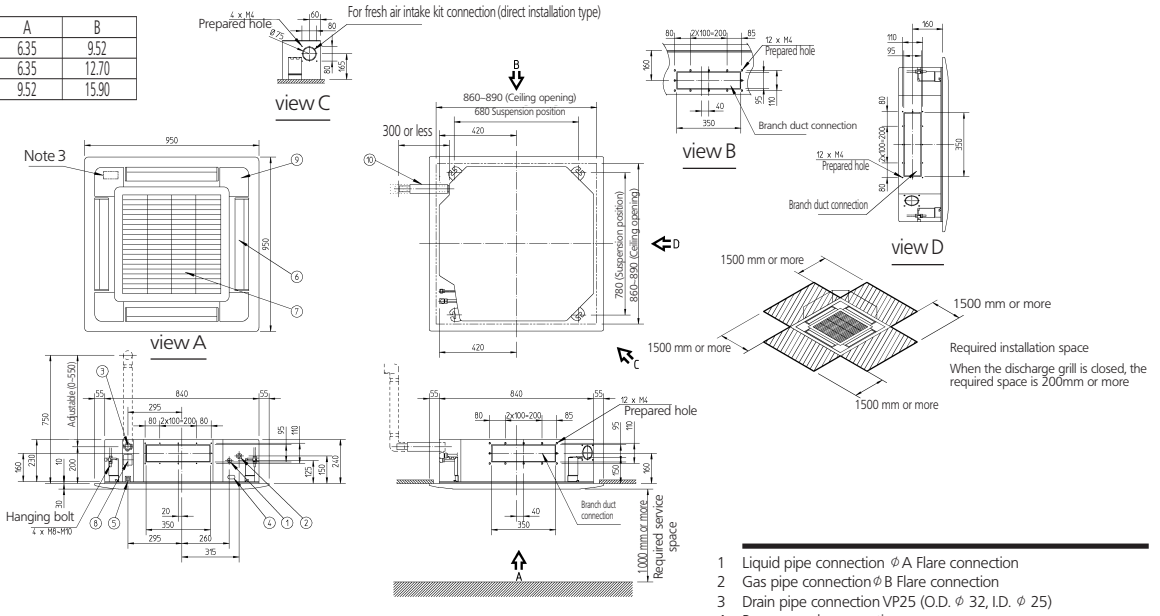
NOTES

1 Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB * outdoor temperature 35°CDB * refrigerant piping length: 7.5m * level difference: 0m.
2 Nominal heating capacities are based on: indoor temperature: 20°CDB * outdoor temperature: 7°CDB/6°CWB * refrigerant piping length: 7.5m * level difference 0m.
3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
4 The sound pressure level is measured at 1.5m distance from the unit. It is a relative value, depending on the distance and acoustic environment. For measuring conditions: please refer to item 6 of this chapter.
5 The sound power level is an absolute value indicating the "power" which a sound source generates.
6 Energy label: scale from A (most efficient) to G (less efficient).
7 Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions).

3 Dimensional drawings

FCQ35-71B7

Model	A	B
FCQ35B	6.35	9.52
FCQ50B, FCQ60B	6.35	12.70
FCQ71B	9.52	15.90



Note:
1. Location of unit's name plate
   Main body: bell mouth inside the suction grille.
   Decoration panel: panel inner frame inside the suction grille..
2. When installing an optional accessory, refer to the installation drawings.
   - For fresh air intake kit - inspection port is necessary
   - For high efficiency filter unit - inspection port is not necessary.
   - For branch duct chamber - inspection port is not necessary.
3. In case of using an infrared remote control, this position will be a signal receiver.
   Refer to the drawing of infrared remote control in detail
4. When it may exceed 30°C and RH 80% in the ceiling or fresh air is inducted into the ceiling, an additional insulation (Thickness 10mm or more of glasswool or polyethylene form) is required.

1 Liquid pipe connection Ø A Flare connection
2 Gas pipe connection Ø B Flare connection
3 Drain pipe connection VP25 (O.D. Ø 32, I.D. Ø 25)
4 Power supply connection
5 Transmission wiring connection
6 Air discharge grille
7 Air suction grille
8 Water supply intake
9 Corner decoration cover
10 Drain hose O.D. Ø 32

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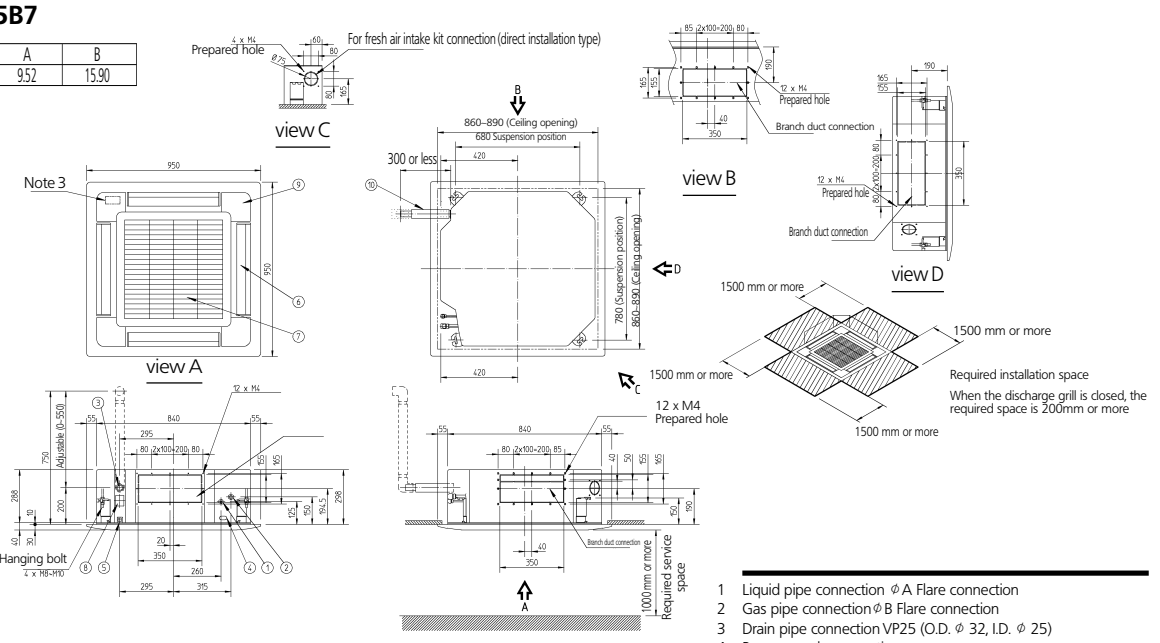
FCQ100-125B7

Model	A	B
FCQ100-125B	9.52	15.90



Note:
1. Location of unit's name plate
   Main body: bell mouth inside the suction grille.
   Decoration panel: panel inner frame inside the suction grille..
2. When installing an optional accessory, refer to the installation drawings.
   - For fresh air intake kit - inspection port is necessary
   - For high efficiency filter unit - inspection port is not necessary.
   - For branch duct chamber - inspection port is not necessary.
3. In case of using an infrared remote control, this position will be a signal receiver.
   Refer to the drawing of infrared remote control in detail
4. When it may exceed 30°C and RH 80% in the ceiling or fresh air is inducted into the ceiling, an additional insulation (Thickness 10mm or more of glasswool or polyethylene form) is required.

1 Liquid pipe connection Ø A Flare connection
2 Gas pipe connection Ø B Flare connection
3 Drain pipe connection VP25 (O.D. Ø 32, I.D. Ø 25)
4 Power supply connection
5 Transmission wiring connection
6 Air discharge grille
7 Air suction grille
8 Water supply intake
9 Corner decoration cover
10 Drain hose O.D. Ø 32

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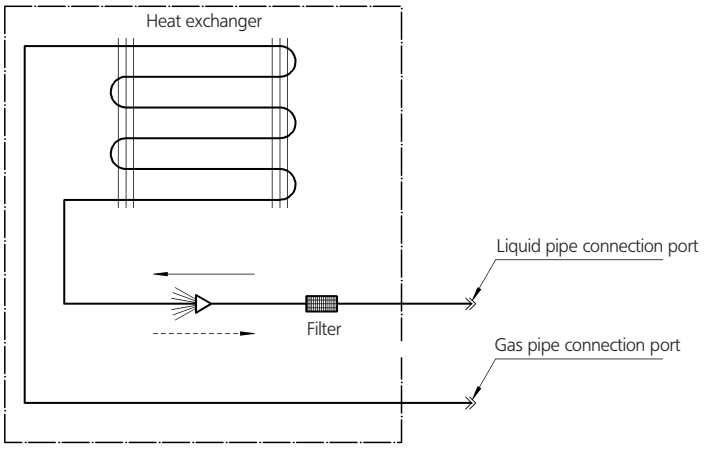
4 Piping diagrams

FCQ-B7



Refrigerant flow

Cooling
Heating

Refrigerant pipe connection port diameters

Model	Gas	Liquid
FCQ35B	Φ 9.52	Φ 6.35
FCQ50-60B	Φ 12.70	Φ 6.35
FCQ71-100-125B	Φ 15.90	Φ 9.52

Check valve · Flare connection · Screw connection · Flange connection · Pinched pipe · Spinned pipe

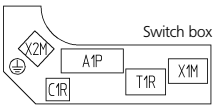
3TW20435-1J

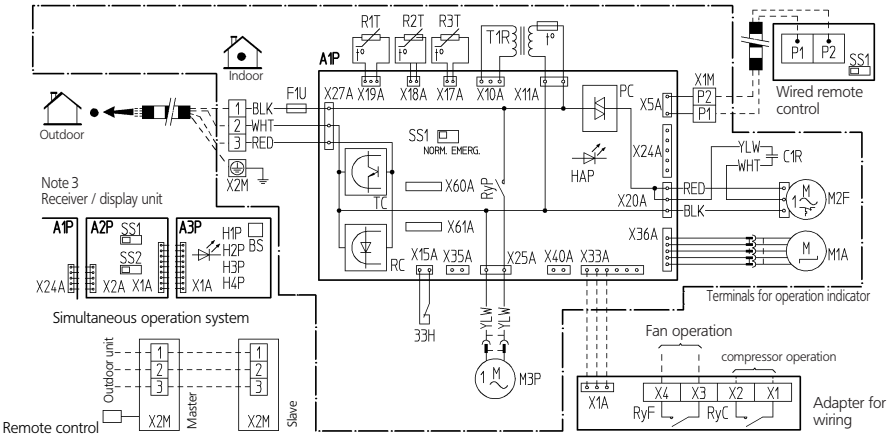
5 Wiring diagrams

FCQ35-60B7

Notes
1. Use copper conductors only.
2. When using the central remote control, see manual for connection to the unit.
3. X24A is connected when the infrared remote control kit is being used.
4. The infrared remote control model varies according to the combination system. See technical data and catalogues before connecting.

Field wiring Terminal
: Connector
: Wire clamp
: Protective earth (screw)
Colours
BLK: Black / WHT: White / RED: Red / YLW: Yellow





33H	Float switch
A1P	Printed circuit board
C1R	Capacitor (M2F)
F1U	Fuse (5A, 250V)
HAP	Light emitting diode (service monitor green)
M1A	Motor (swing flap)
M2F	Motor (indoor fan)
M3P	Motor (drain pump)
Q1F	Thermo switch (M2F embedded)
R1T	Thermistor (air)
R2T	Thermistor (liquid)
R3T	Thermistor (coil)

RyP	Magnetic relay (M3P)
SS1	Selector switch (emergency)
T1R	Transformer (220-240V/22V)
X1M	Terminal strip (power)
X2M	Terminal strip (control)
PC	Phase control circuit
RC	Signal receiver circuit
TC	Signal transmission circuit
Wired remote control	
SS1	Selector switch (main/sub)

Receiver / display unit (attached to infrared remote control)	
A2P,A3P	Printed circuit board
BS	Push button (on/off)
H1P	Light emitting diode (on-red)
H2P	Light emitting diode (timer-green)
H3P	Light emitting diode (filter sign-red)
H4P	Light emitting diode (defrost-orange)
SS1	Selector switch (main/sub)
SS2	Selector switch (wireless address set)

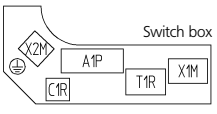
Adapter for wiring	
RyC,RyF	Magnetic relay
Connector for optional parts	
X60A,X61A	Connector (interface adapter for sky air series)
X33A	Connector (adapter for wiring)
X35A	Connector (group control adapter)
X40A	Connector (remote ON/OFF forced OFF)

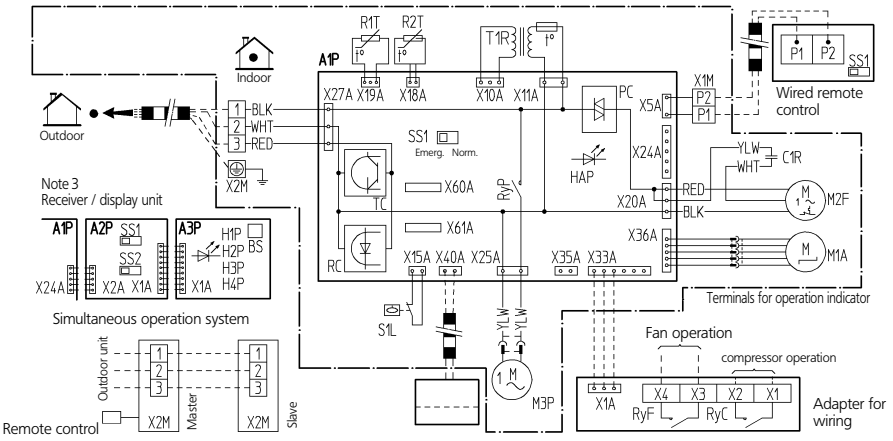
3TW25086-1A

FCQ71-125B7

Notes
1. Use copper conductors only.
2. When using the central remote control, see manual for connection to the unit.
3. X24A is connected when the infrared remote control kit is being used.
4. The infrared remote control model varies according to the combination system. See technical data and catalogues before connecting.

Field wiring Terminal
: Connector
: Wire clamp
: Protective earth (screw)
Colours
BLK: Black / WHT: White / RED: Red / YLW: Yellow





S1H	Float switch
A1P	Printed circuit board
C1R	Capacitor (M2F)
HAP	Light emitting diode (service monitor green)
M1A	Motor (swing flap)
M2F	Motor (indoor fan)
M3P	Motor (drain pump)
Q1F	Thermo switch (M2F embedded)
R1T	Thermistor (air)
R2T	Thermistor (liquid)

RyP	Magnetic relay (M3P)
SS1	Selector switch (emergency)
T1R	Transformer (220-240V/22V)
X1M	Terminal strip (power)
X2M	Terminal strip (control)
PC	Phase control circuit
RC	Signal receiver circuit
TC	Signal transmission circuit
Wired remote control	
SS1	Selector switch (main/sub)

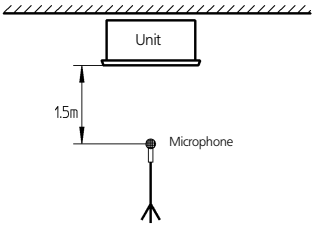
Receiver / display unit (attached to infrared remote control)	
A2P,A3P	Printed circuit board
BS	Push button (on/off)
H1P	Light emitting diode (on-red)
H2P	Light emitting diode (timer-green)
H3P	Light emitting diode (filter sign-red)
H4P	Light emitting diode (defrost-orange)
SS1	Selector switch (main/sub)
SS2	Selector switch (wireless address set)

Adapter for wiring	
RyC,RyF	Magnetic relay
Connector for optional parts	
X60A,X61A	Connector (interface adapter for sky air series)
X33A	Connector (adapter for wiring)
X35A	Connector (group control adapter)
X40A	Connector (remote ON/OFF forced OFF)

3TW25906-1

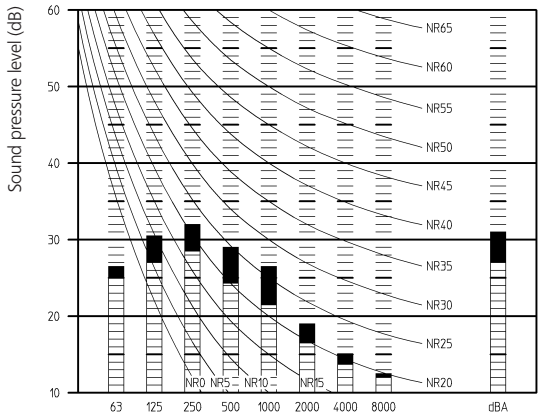
6 Sound level

6-1 Sound level data

Model	Sound pressure level		Measuring location	Sound power level (H) (cooling/heating)
	230V, 50Hz			
	Cooling/Heating			
	H	L		
FCQ35B7V1	31	27	Location of microphone 	48
FCQ50B7V1	31	27		48
FCQ60B7V1	33	28		50
FCQ71B7V3B	33	28		50
FCQ100B7V3B	37	32		53
FCQ125B7V3B	40	35		56

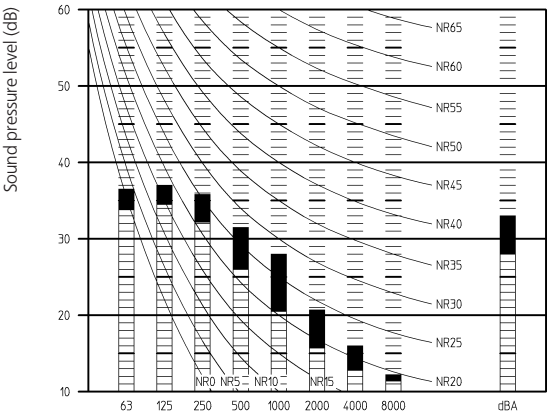
6-2 Sound pressure spectrum

FCQ35-50B7



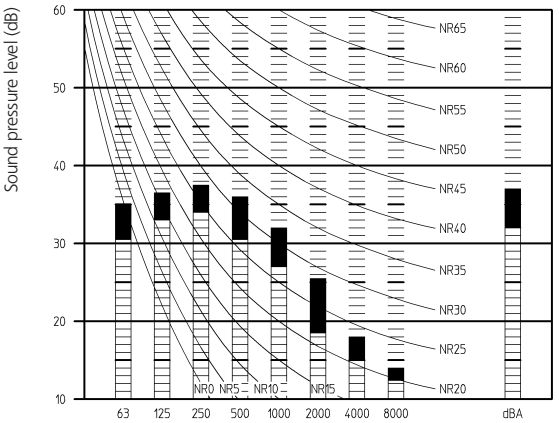
3TW22837-1

FCQ60-71B7



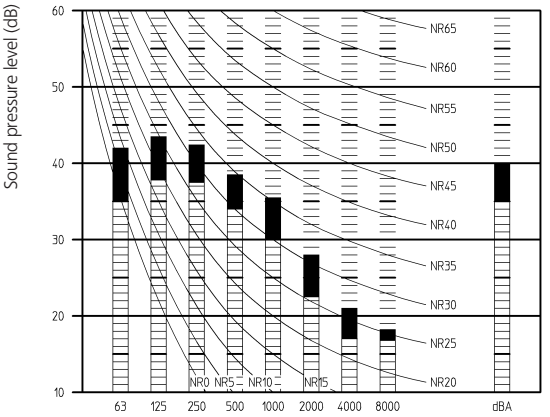
3TW22857-1

FCQ100B7



3TW22877-1

FCQ125B7



3TW22887-1

NOTES

1 Data is valid at free field condition
2 Operation sound levels are valid at nominal operation condition 230V
3 dB(A) = A-weighted sound pressure level (A-scale according to IEC)
4 Reference acoustic pressure 0dB = 20Pa

Legend
High speed
Low speed

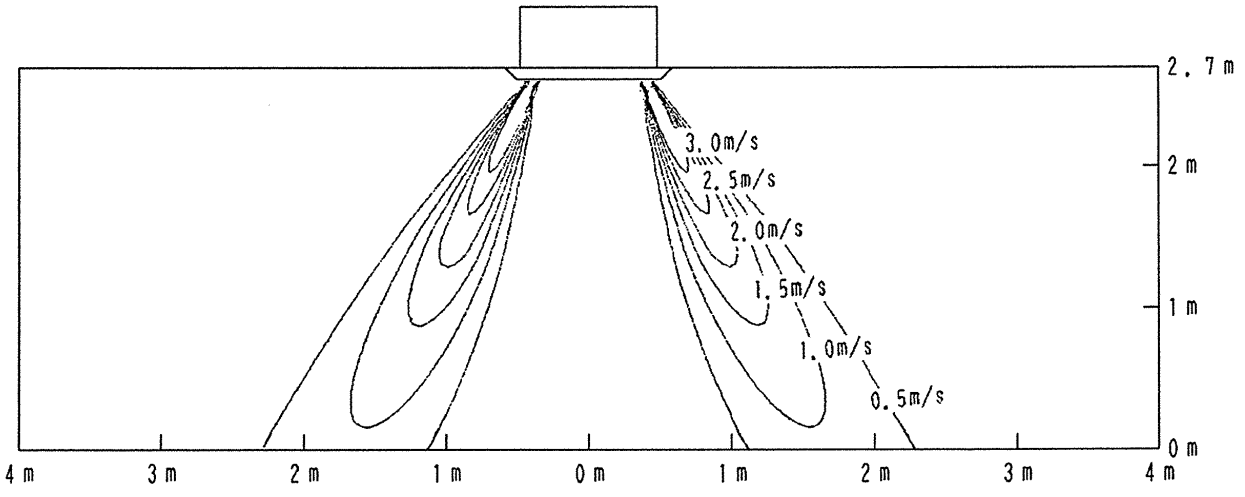
7 Air flow patterns

7

FCQ35B7

Heating - air velocity distribution

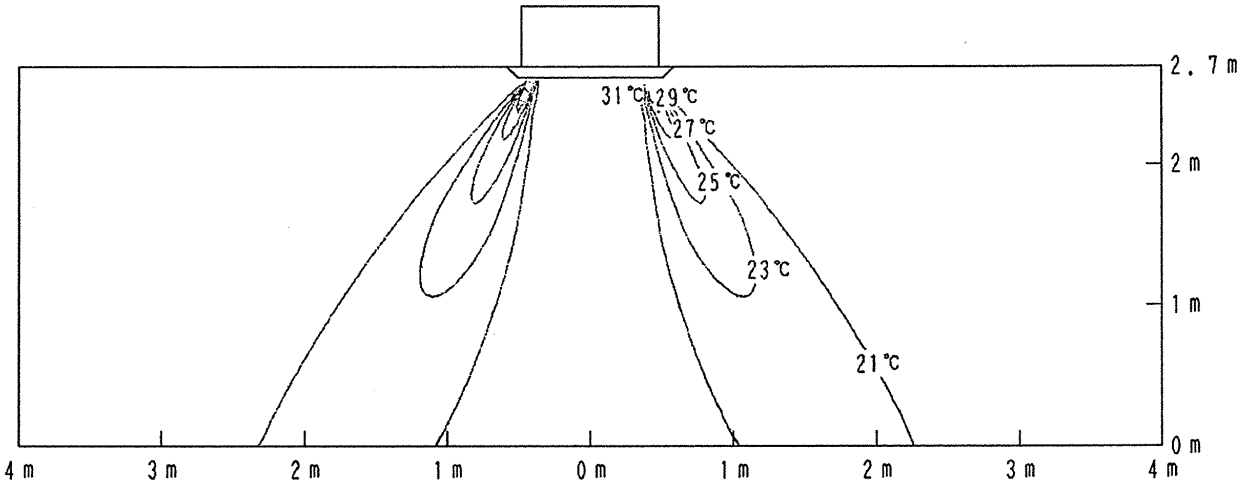
4-way discharge, air flow direction: down



FCQ35B7

Heating - air temperature distribution

4-way discharge, air flow direction: down



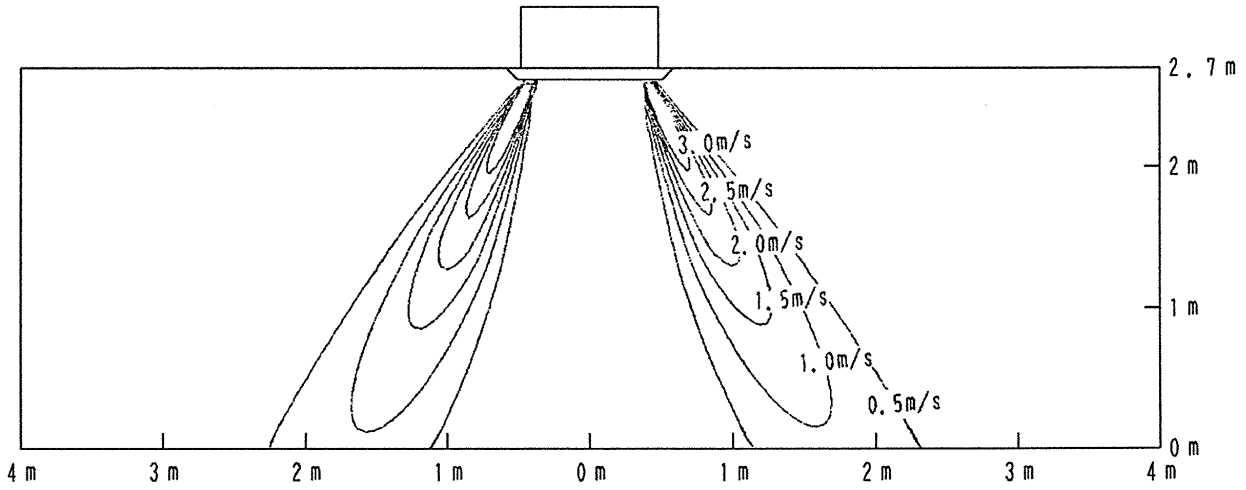
4D024116

7 Air flow patterns

FCQ50B7

Heating - air velocity distribution

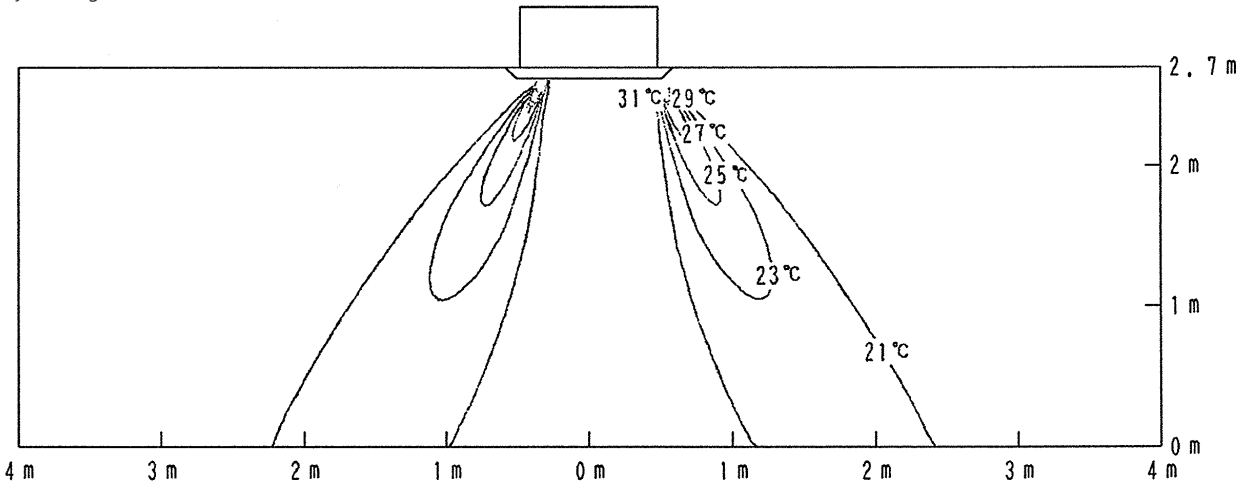
4-way discharge, air flow direction: down



FCQ50B7

Heating - air temperature distribution

4-way discharge, air flow direction: down



4D024117

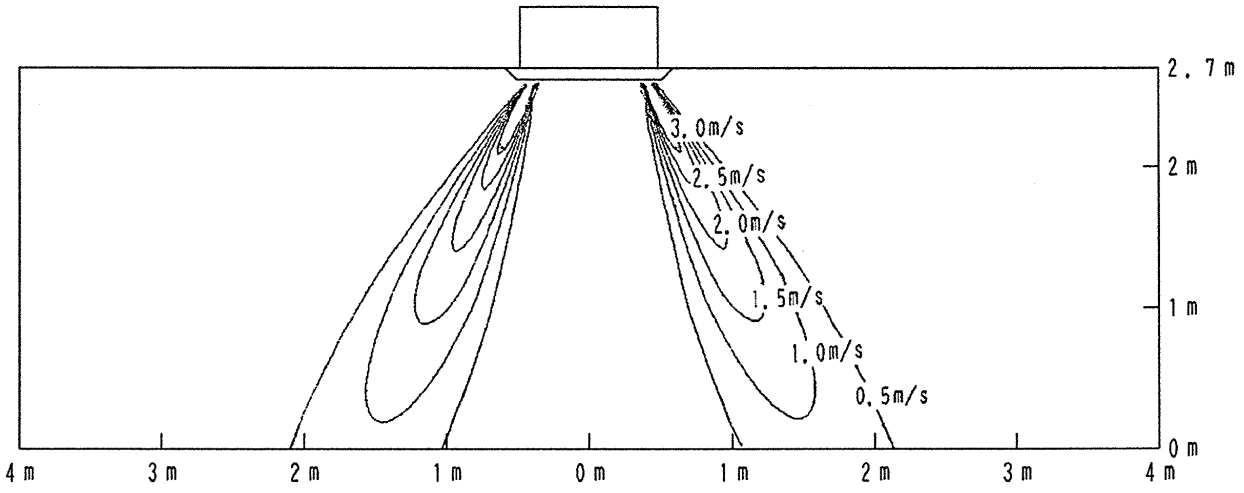
7 Air flow patterns

7

FCQ60-71B7

Heating - air velocity distribution

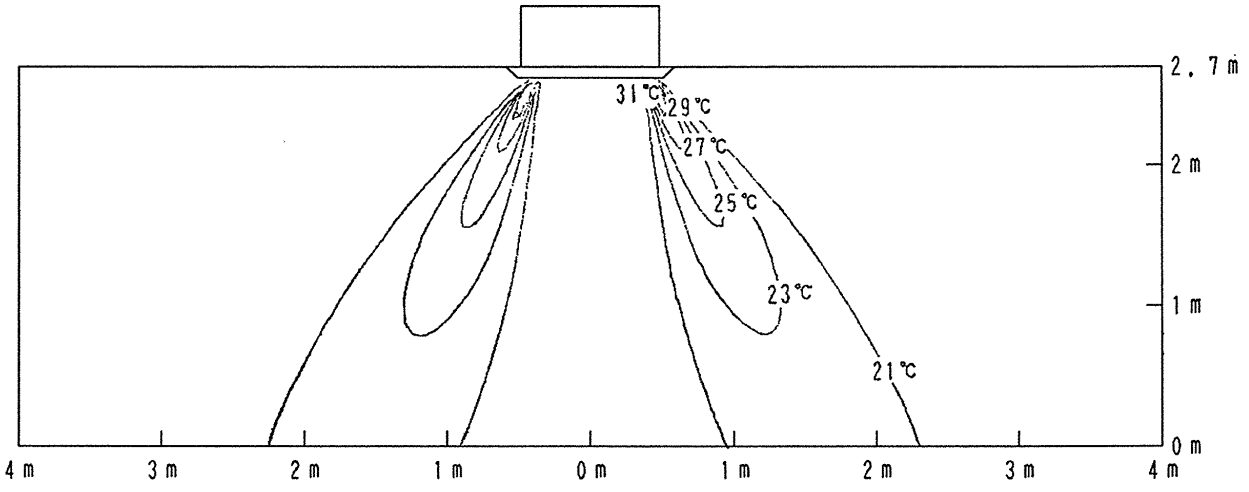
4-way discharge, air flow direction: down



FCQ60-71B7

Heating - air temperature distribution

4-way discharge, air flow direction: down



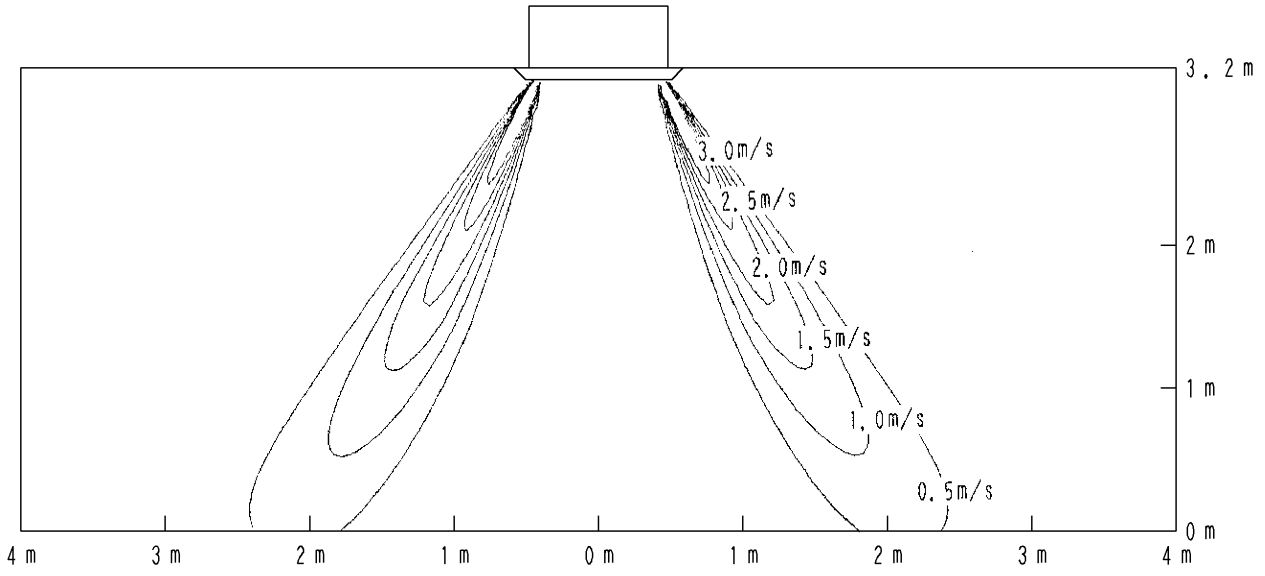
4D024118

7 Air flow patterns

FCQ100-125B7

Heating - air velocity distribution

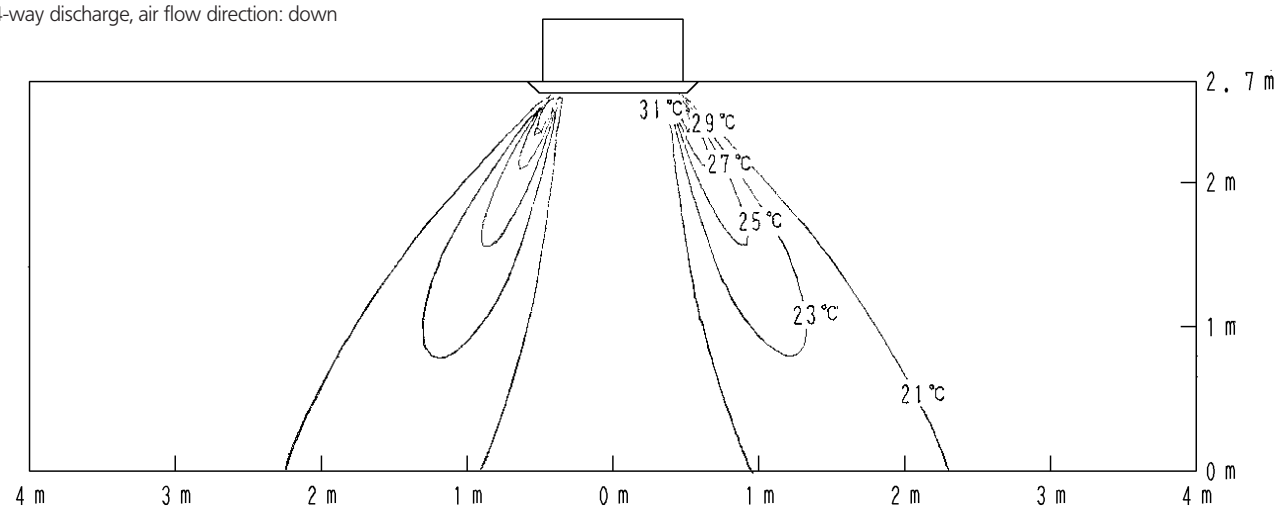
4-way discharge, air flow direction: down



FCQ100-125B7

Heating - air temperature distribution

4-way discharge, air flow direction: down



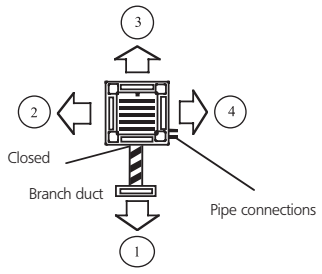
4D024119

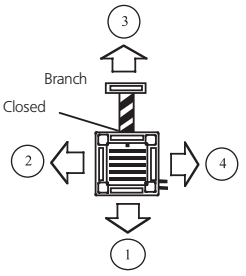
8 Branch duct connections

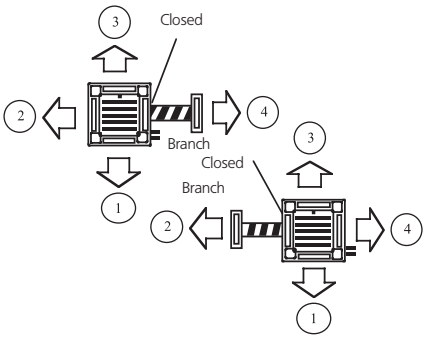
8 FCQ-B7

1 branch duct - 3 way blow

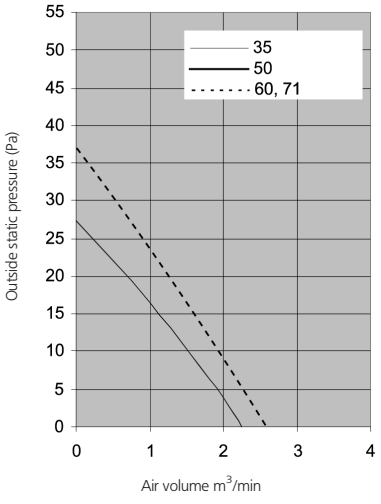
Discharge grill: K-DGSC4B (connection: diameter 150mm)
Flexible duct K-FDK154B (connection: diameter 150mm, length: 4m)
Air volume: 1,5-2,0 m^3/min



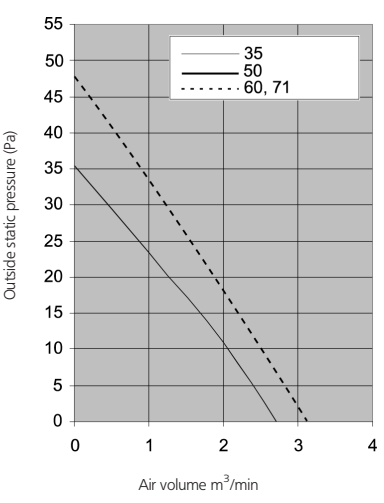




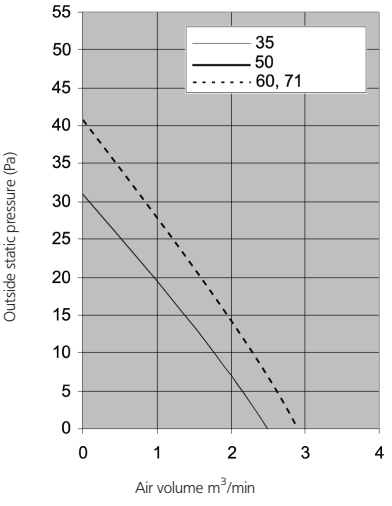
1 branch duct connected (position 1)



1 branch duct connected (position 3)



1 branch duct connected (position 2 or 4)



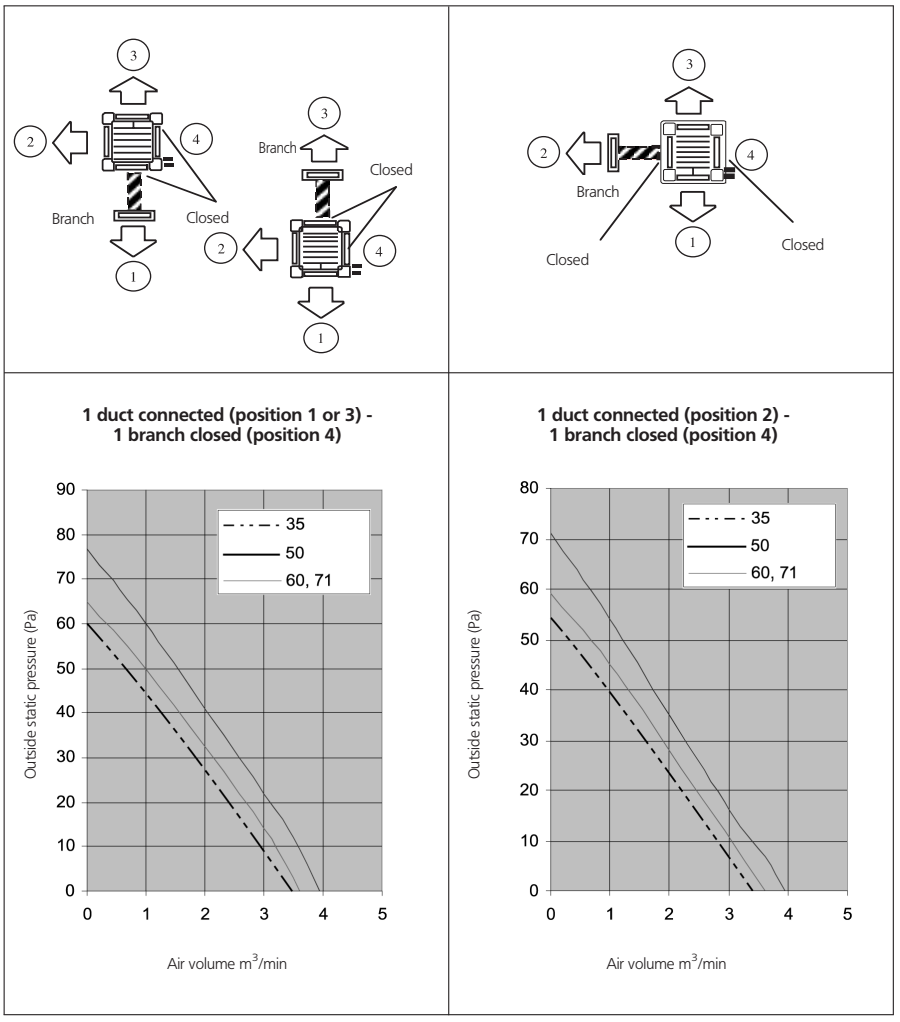
3TW22839-7

8 Branch duct connections

FCQ-B7

1 branch duct - 2 way blow

Discharge grill: K-DGSC4B (connection: diameter 150mm)
Flexible duct K-FDK154B (connection: diameter 150mm, length: 4m)
Air volume: 2,0-3,0 m^3/min



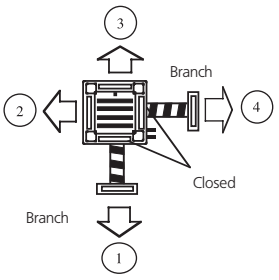
3TW22839-8

8 Branch duct connections

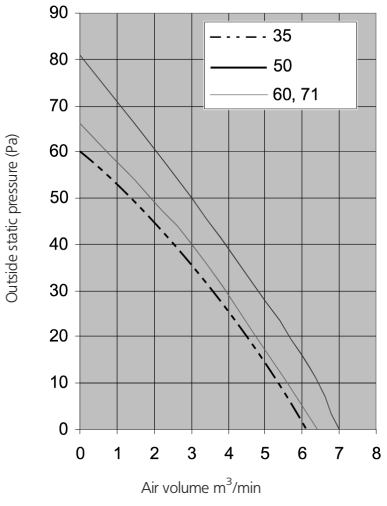
8 FCQ-B7

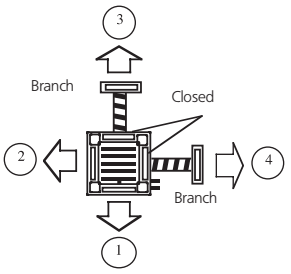
2 branch duct - 2 way blow

Discharge grill: K-DGSC4B (connection: diameter 150mm)
Flexible duct K-FDK154B (connection: diameter 150mm, length: 4m)
Air volume: 4,0-5,0 m^3/min

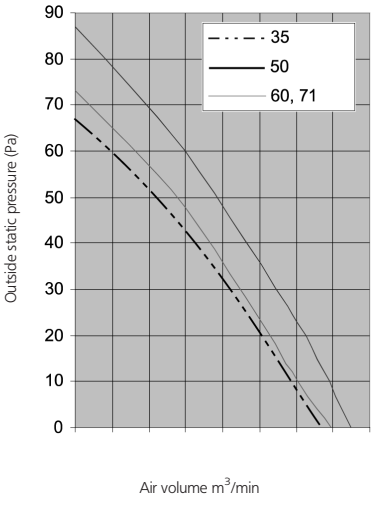


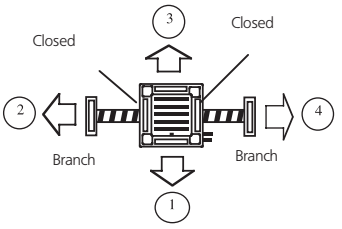
2 branch ducts connected (position 1 and 4)



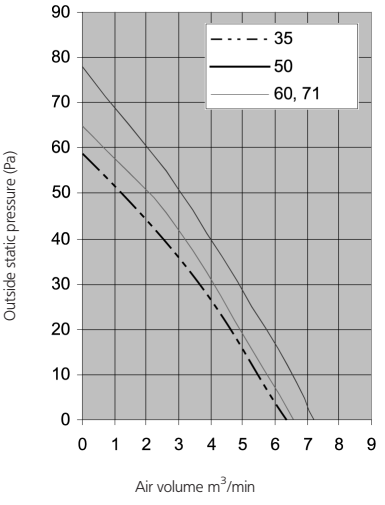


2 branch ducts connected (position 3 and 4)





2 branch ducts connected (position 2 and 4)



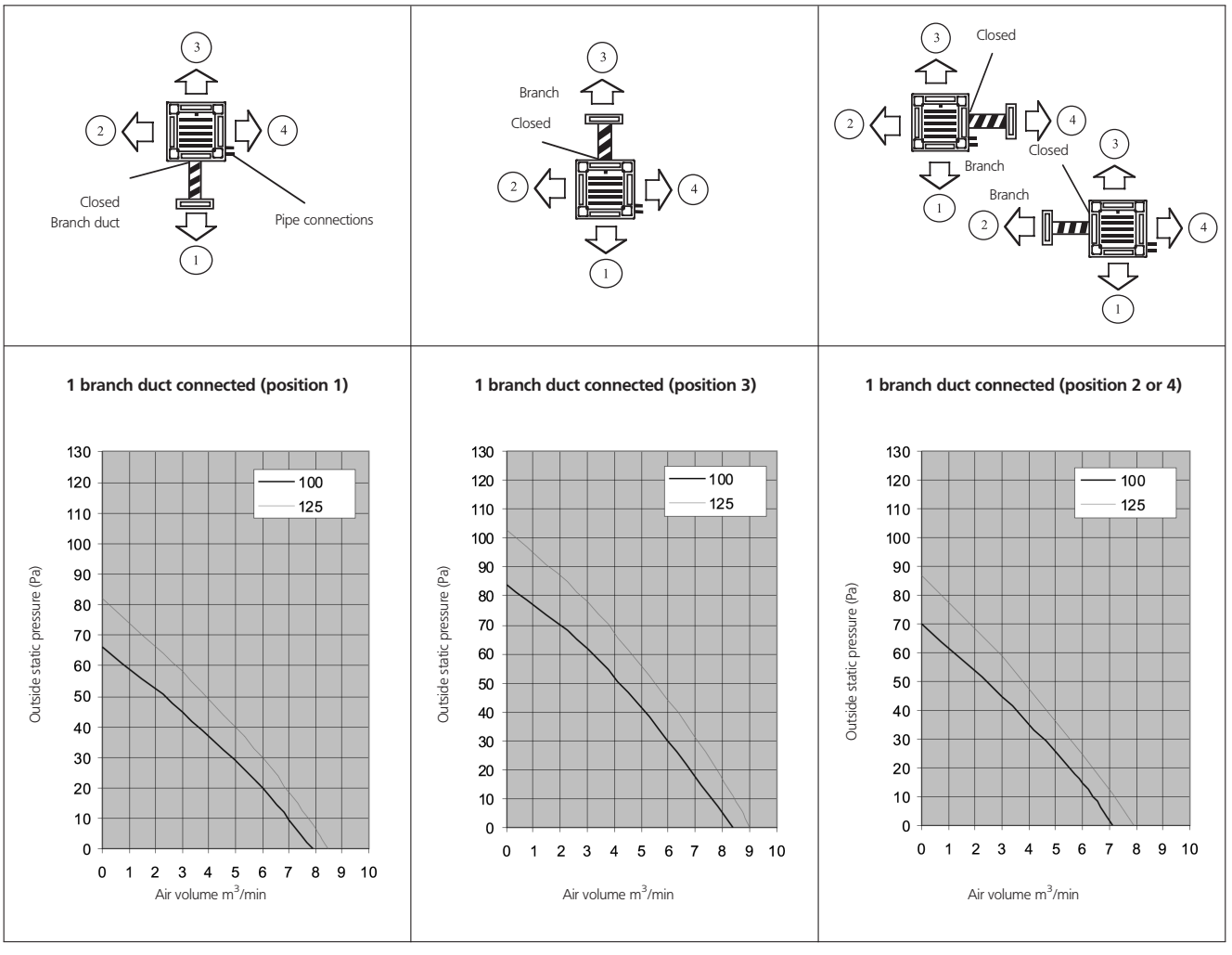
3TW22839-9

8 Branch duct connections

FCQ-B7

1 branch duct - 3 way blow

Discharge grill: K-DGSC4B (connection: diameter 200mm)
Flexible duct: K-FDK154B (connection: diameter 200mm, length: 6m)
Air volume: 5,0-7,0 m^3/min



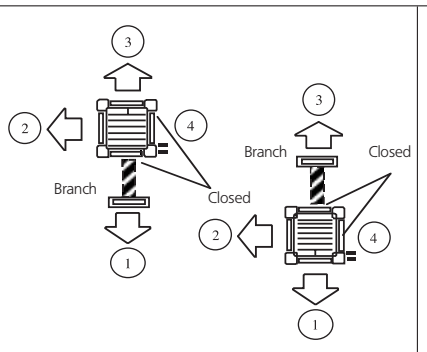
3TW22879-7

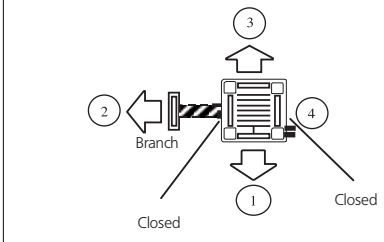
8 Branch duct connections

8 FCQ-B7

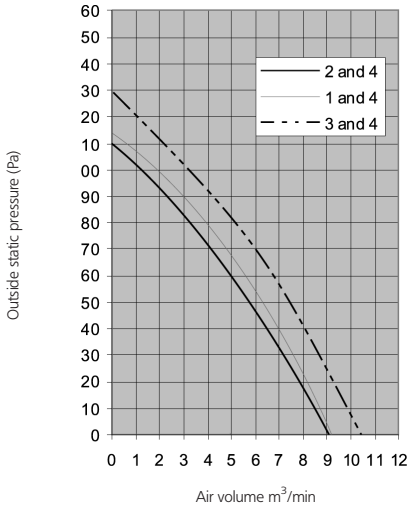
1 branch duct - 2 way blow

Discharge grill: K-DGSC4B (connection: diameter 200mm)
Flexible duct: K-FDK154B (connection: diameter 200mm, length: 6m)
Air volume: 7,0-10,0 m^3/min





1 duct connected (position 1, 2 or 3) - 1 branch closed (position 4)



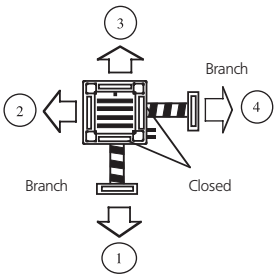
3TW22879-8

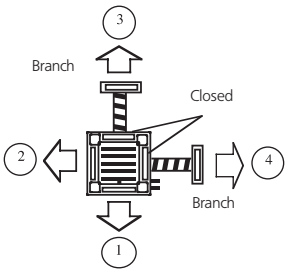
8 Branch duct connections

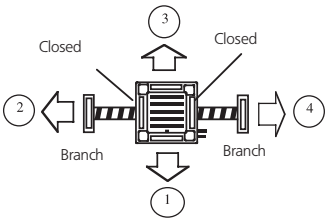
FCQ-B7

2 branch duct - 2 way blow

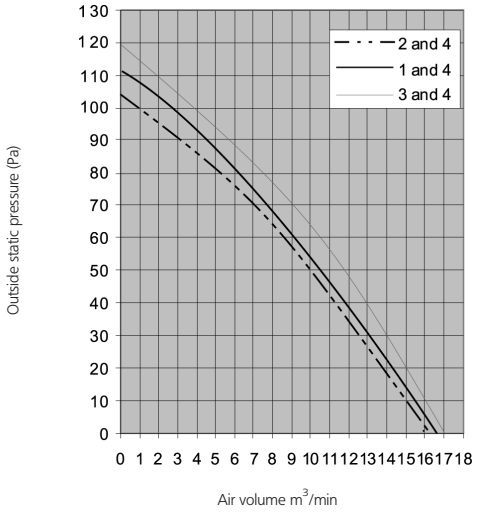
Discharge grill: K-DGSC4B (connection: diameter 200mm)
Flexible duct: K-FDK154B (connection: diameter 200mm, length: 6m)
Air volume: 9,0-11,0 m^3/min







2 branch ducts connected (4 and 1 or 4 and 2 or 4 and 3)

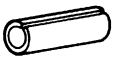


3TW22879-9

9 Accessories

9-1 Standard accessories

Check if the following accessories are included with your unit.

 Clamp 1 pc.	Also used as packing material Paper pattern for installation 1 pc.	 Drain hose 1 pc.
 Screws M5 For paper pattern for installation 4 pcs.	 Washer for hanging bracket 8 pcs.	 Sealing 2 pcs.
Insulation for fitting 1 of each  For gas pipe For liquid pipe		Other: installation manual, operation manual

9 Accessories

9-2 Optional accessories

Options

Item	Model		FCQ35	FCQ50	FCQ60	FCQ71	FCQ100	FCQ125
Decoration panel			BYC125K7W1B					
Filter related	High efficiency filter 65%	Colorimetric method	KAFJ556K80				KAFJ556K160	
	High efficiency filter 90%	Colorimetric method	KAFJ557K80				KAFJ557K160	
	Replacement high effiency filter 65%	Colorimetric method	KAFJ552H80				KAFJ552H160	
	Replacement high effiency filter 90%	Colorimetric method	KAFJ553H80				KAFJ553H160	
	Filter chamber		KDDFJ55K160					
	Replacement long-life filter	Non-woven type	KAFJ551K160					
	Ultra-long life filter		KAFJ55K160					
	Replacement ultra long-life filter		KAFJ55K160H					
Fresh air intake kit	Chamber type	Without T-shape and fan	KDDJ55B160					
		With T-shape, and fan	KDDJ55B160F					
		With T-shape, without fan	KDDJ55B160K					
	Direct installation type		KDDJ55X160					
Sealing member of air discharge outlet			KDBHJ55B160					
Panel spacer			KDBP55H160WA					
Branch duct chamber			KDJ55B80				KDJ55B160	
Chamber connection kit			KKSJ55K160					

Control systems

Item	Model		FCQ35	FCQ50	FCQ60	FCQ71	FCQ100	FCQ125
Remote control	Infrared	Heat pump	BRC7C512W					
		Cooling only	BRC7C513W					
	Wired		BRC1D527					
Wiring adaptor for electrical appendices *1			KRP1B57					
Wiring adaptor for electrical appendices *1			KRP4A53					
Wiring adapter (hour meter) *2			EKRP1B2					
Remote sensor			KRCS01-1					
Installation box for adapter PCB			KRP1C98					
Central remote control			DCS302C51					
Electrical box with earth terminal (3 blocks)			KJB311A					
Unified ON/OFF control			DCS301B51					
Electrical box with earth terminal (2 blocks)			KJB212A					
Noise filter (for electromagnetic interface use only)			KEK26-1					
Schedule timer			DST301B51					
Interface adapter for Sky Air series			DTA112B51					
Remote ON/OFF, forced OFF			EKRORO					

*1 Installation box for adaptor PCB (KRP1C98) is necessary
*2 Possibility to connect an hour meter. This part should not be installed inside the equipment.

3TW25089-1E

9 Accessories

9-2 Optional accessories

FCQ-B7

Fresh air intake kit

1. Option kits KDDJ55B160, KDDJ55B160K, KDDJ55B160F

Following restrictions must be kept:

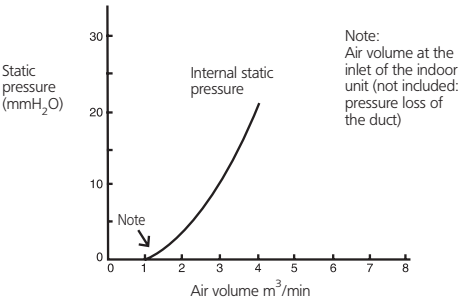
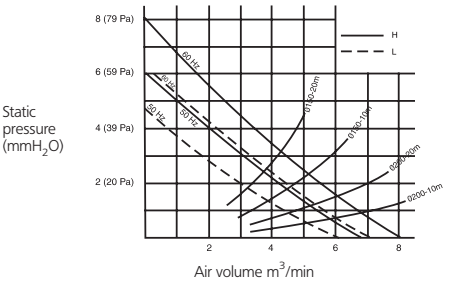
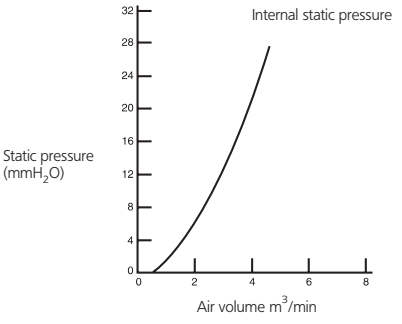
1. Maximum 20% of the nominal indoor unit air volume can be sucked from the fresh air duct.
2. Put an air filter in the duct.
3. When a duct fan is used, use the option kit together with the duct fan. When only the duct fan is operating, dust can fall from the air filter into the room.

   Adapter for wiring KRP1B57
   Installation box for adaptor PCB (KRP1C98) is necessary

2. Option kit KDDJ55X160

This kit can be used when the duct length is less than 4 m.
Approximately 2 or 3% of the nominal indoor unit air volume can be sucked from the fresh air duct.

The use of a duct fan is not allowed because the sound of the duct can be heard at the indoor unit.

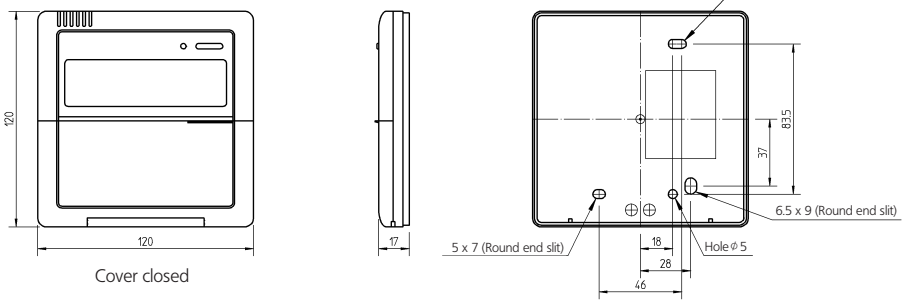
Option kit	Fresh air intake volume / static pressure
KDDJ55B160 (without T-joint connection and without duct fan)	
KDDJ55B160K (with T-joint connection, without duct fan)	
KDDJ55B160F (with T-joint connection and with duct fan)	
KDDJ55X160 (direct installation)	

3TW22839-10A

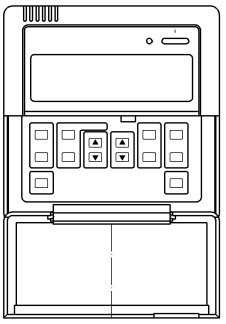
10 Control systems

10-1 Wired remote control

BRC1D527



Cover closed



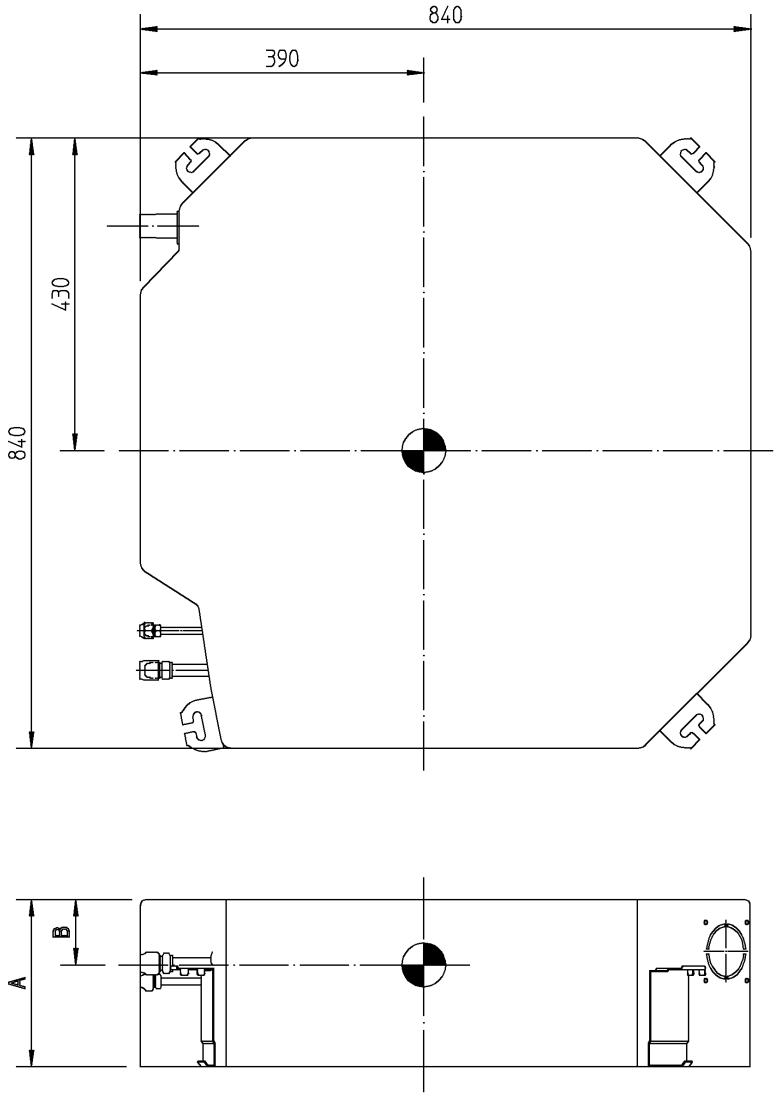
Cover open

3TW23651-2

11 Center of gravity

11

FCQ-B7



Model	A	B
FCQ35-71B	230	90
FCQ100-125B	288	120

4TW22839-2B

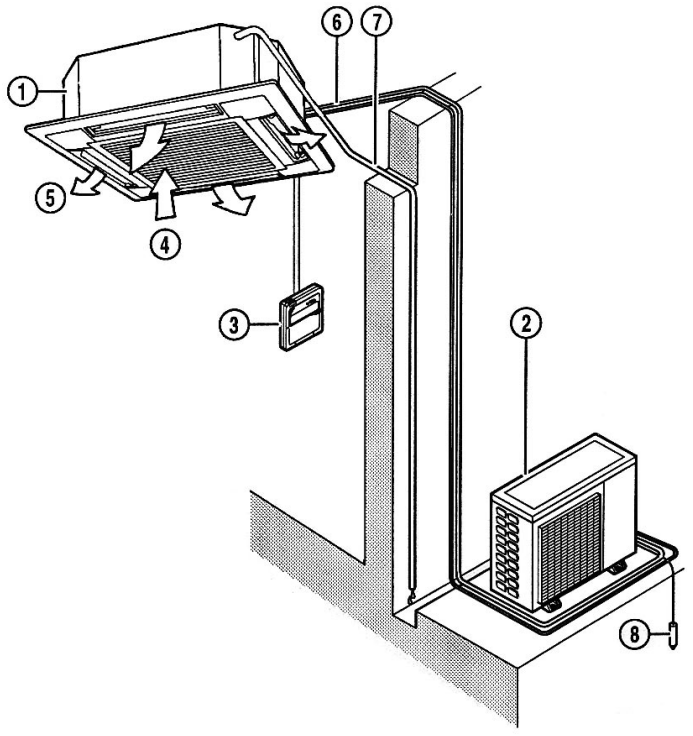
12 Safety device settings

Model	Safety devices	35	50	60	71	100	125
FCQ-B	Fuse(°C)	250V, 5A	250V, 5A	250V, 5A	-	-	-
	Fan motor thermal protector (°C)	OFF: 130±5 ON: 80±20	OFF: 130±5 ON: 80±20	OFF: 130±5 ON: 80±20	OFF: 130±5 ON: 80±20	OFF: 130±5 ON: 80±20	OFF: 130±5 ON: 80±20
	Drain pump fuse (°C)	145	145	145	145	145	145

3TW22831-3B

13 Installation

FCQ-B7



Number	Description
1	Indoor unit
2	Outdoor unit
3	Remote control
4	Inlet air
5	Discharged air
6	Refrigerant piping, connection electric wire
7	Drain pipe
8	Ground wire Wire to ground from the outdoor unit to prevent electrical shocks.